



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	HELPER, UT	<b>Accident Number:</b>	DEN00LA069
<b>Date &amp; Time:</b>	04/01/2000, 1430 MST	<b>Registration:</b>	N50330
<b>Aircraft:</b>	Hawkins & Powers UH-1B	<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 133: Rotorcraft Ext. Load		

## Analysis

As the helicopter approached logging personnel with a 150 foot long line, the pilot heard a 'Shhhh' sound and was advised smoke was coming from the engine. He turned and proceeded down the mountain. The engine then 'quit.' The helicopter collided with heavily wooded steep terrain. The number 1 and 2 bearings were submitted for metallurgical examination. The metallurgical report stated that 'the most likely cause of [the] engine malfunction was degradation of the Position #1 bearing due to insufficient lubrication.' All other damage appeared to be 'secondary.' The accessory carrier assembly was oil flow tested and found to be 'acceptable,' albeit 'near the lower end of requirements.' Debris in the bearing oil strainer was believed to be 'coked oil and epoxy hardener, both unusual for this area of the engine.'

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Total failure of the number 1 bearing due to lack of lubrication, the oil flow being restricted by a foreign object (epoxy hardener). Factors were trees and the unavailability of suitable terrain for a forced landing.

## Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF  
Phase of Operation: MANEUVERING

### Findings

1. (C) ENGINE ASSEMBLY,BEARING - FAILURE,TOTAL
2. (C) LUBRICATING SYSTEM - FLOW RESTRICTED
3. (C) LUBRICATING SYSTEM,OIL FILTER/SCREEN - FOREIGN OBJECT

Occurrence #2: FORCED LANDING  
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: DESCENT - EMERGENCY

### Findings

4. (F) OBJECT - TREE(S)
5. (F) TERRAIN CONDITION - NONE SUITABLE

## Pilot Information

<b>Certificate:</b>	Airline Transport	<b>Age:</b>	54
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Instrument Rating(s):</b>	Airplane; Helicopter
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	12104 hours (Total, all aircraft), 6500 hours (Total, this make and model), 11180 hours (Pilot In Command, all aircraft), 158 hours (Last 90 days, all aircraft), 69 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Hawkins & Powers	<b>Registration:</b>	N50330
<b>Model/Series:</b>	UH-1B UH-1B	<b>Engines:</b>	1 Turbo Shaft
<b>Operator:</b>	PRECISION AIR, LLC	<b>Engine Manufacturer:</b>	Lycoming
<b>Operating Certificate(s) Held:</b>		<b>Engine Model/Series:</b>	T53-L-13
<b>Flight Conducted Under:</b>	Part 133: Rotorcraft Ext. Load		

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	PVU, 4494 ft msl	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Lowest Ceiling:</b>	None / 0 ft agl	<b>Wind Speed/Gusts, Direction:</b>	5 knots / , 260°
<b>Temperature:</b>	11 °C	<b>Visibility</b>	10 Miles
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	HELPER, UT (NONE)	<b>Destination:</b>	

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Destroyed
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Latitude, Longitude:</b>			

## Administrative Information

<b>Investigator In Charge (IIC):</b>	ARNOLD W SCOTT	<b>Adopted Date:</b>	03/02/2001
<b>Investigation Docket:</b>	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at <a href="mailto:pubinquiry@ntsb.gov">pubinquiry@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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